

June 28, 2001

ORGANIZATION: Nuclear Energy Institute (NEI)

SUBJECT: SUMMARY OF MEETING ON EARLY SITE PERMIT (ESP) EFFORTS

On May 15, 2001, representatives of NEI met with the Nuclear Regulatory Commission (NRC) to discuss upcoming efforts planned by the nuclear industry to prepare ESP applications. Enclosure 1 is the meeting agenda; Enclosure 2 is a listing of the meeting attendees; and Enclosure 3 is a copy of the handouts provided by NEI.

### **NEI ESP Guidance Document**

NEI discussed the contents of the ESP Application Preparation Guidance Document being developed to provide guidance to a potential applicant preparing an ESP application. NEI's goal is to describe a standard format that applicants should use. NEI stated that they still expect the first draft of the document to be available in August 2001. The following is a summary of the discussions of the three major sections of the guidance.

#### **Site Safety**

NEI stated they were trying to develop guidance that would provide flexibility to place different designs on a site. Their approach is to envelope all plant designs that the applicant wants considered for a particular site, including the type, number of units, and power level. The application would list about 100 parameters that characterize the plant envelope to be used at the site, using the most "pessimistic" (or bounding) values to specify upper bounds for these parameters. NEI proposes to start with the design envelopes of the three certified designs (ABWR, System 80+, and AP600), and are considering using those of other unique designs, such as the Pebble Bed Modular Reactor (PBMR).

NEI stated they intend to update its site selection document by the end of June 2001, and expect to determine what the critical parameters are by that time. The industry plans to have a demonstration program on the site selection document.

The staff noted that this approach may limit the use of certain designs on specific sites. For instance, the seismic response spectra for the certified designs is different for each design.

The staff also stated that past experience has shown that insufficient consideration of certain soil parameters could increase review time, and reminded NEI that an ESP applicant must consider factors such as overburden on rock, the kind of soil that is at the site, and the suitability of the site for a nuclear power plant. In addition, the staff suggested that NEI use a numbering system in their guidance document that aligns with that of Regulatory Guide (RG) 1.70, "Standard Format and Contents of Safety Analysis Reports for Nuclear Power Plants (LWR Edition)" and the Standard Review Plan (SRP) (NUREG-0800).

### Environmental Review

NEI stated that they were following the guidance of RG 4.2, "Preparation of Environmental Reports for Nuclear Power Stations" while developing their guidance.

### Emergency Planning

NEI indicated that they were still working on this portion of the guidance, and that they were following NRC regulatory guidance.

### **Rulemaking Activities**

#### Duplicative Reviews

NEI stated that the industry was interested in building reactors on a site that currently has nuclear power plants operating on the site. It wants to focus on the differences that have occurred since the Construction Permit (CP) and/or Operating License (OL) was issued for the operating plants, such as new information that has been identified since the earlier evaluation of the site, new regulations that have been promulgated, or physical changes to the site.

The staff stated that the applicant needs to provide all the information required in Subpart A of Part 52 of Title 10 of the *Code of Federal Regulations* (10 CFR Part 52) in an ESP application, and that it is not appropriate to put any filter on the information submitted because the evaluation of the earlier CP sites was done with a specific plant design in mind. The applicant can, however, identify information that has already been provided, and state whether the information is relevant to the new application and whether it has changed since its original submittal.

The ESP application will be a completely new application for which no licensing basis has been established. The staff's safety conclusions regarding the acceptability of a site will be drawn based on compliance with the regulations in 10 CFR Parts 20, 50, and 100. Some of the applicable regulations and regulatory guidance have changed since plants were sited in the past, and the staff needs to establish a complete record for the new application with bounding design parameters in mind. The staff further noted that 10 CFR 52.29 does allow that certain environmental issues do not have to be studied in detail if they have been addressed in previous reviews.

#### Alternative Site Analysis

NEI stated that it believes that requirements to evaluate alternate sites should be excised from Subpart A of 10 CFR Part 52. The staff stated that although the decision authority on the need for power lies within the State, the NRC staff determines and discloses the potential environmental cost and benefits of building a nuclear power plant. The staff performs an alternative site review to determine what factors at the site under consideration make it an acceptable site. The staff further noted that its alternative site review may be conducted differently for a plant run by a utility to supply power to its service area versus that of a merchant plant because the specific purpose and need for the plant is different.

NEI indicated that they will be submitting a white paper on this issue in June 2001, and that they were considering submitting a related petition for rulemaking.

### **Scope and Schedule Document**

NEI provided the staff with their proposed milestone schedule for completing an Early Site Permit review, stating that they wanted to provide input to support the readiness assessment underway within the agency. NEI indicated that the staff previously performed CP reviews in 18 - 36 months in the mid-1970s, with an average of 26-27 months, and therefore, they believe that the ESP review could be completed in about 26 months.

The staff noted that during that era, there was usually little local opposition and few environmental laws. Since that time, many new environmental laws have been passed. The staff stated it was performing its own schedule assessment, and would consider their proposal during its development. To support that assessment, NEI was requested to provide a list of assumptions that it made while developing the schedule.

### **Public Meetings and Site Characterization Studies**

NEI confirmed that it expected the industry to submit an ESP application in mid-2002. The staff stated that to address its public confidence cornerstone, it has an obligation to engage the public early in the review process to obtain the perspective of the local interested members of the public. The staff had established a practice of meeting with the public in the vicinity of the site approximately 12 months before a CP application was submitted, and believes that such a meeting is appropriate for an ESP application.

In addition, the staff stated that early interactions between the staff and the applicant should start taking place approximately 9 to 12 months before the application is submitted. The staff had established a practice of early interaction with CP applicants to review the data gathering methodologies and activities, including the quality assurance program applied to those activities. The staff has a need to ensure that its regulatory guidance is being acceptably followed, as the agency will likely embrace this site characterization information (from the meteorological measurements program, soil sampling program, and terrestrial and aquatic ecology walkdowns) during its evaluation of the ESP application. The staff concludes that early interaction is prudent to help ensure that the data gathered during this period is acceptable for use in the ESP application. Conversely, the applicant can accept the risk of proceeding with the site characterization activities without early interaction with the staff.

NEI indicated that they would advise their members of the need for this early interaction.

***/RA by J. Wilson for:/***

Thomas J. Kenyon, Senior Project Manager  
Future Licensing Organization  
Office of Nuclear Reactor Regulation

Project No. 689

Enclosures: As stated (3)

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**Proposed Agenda**  
**NEI/NRC Meeting on Early Site Permitting**  
**May 15, 2001**

- |   |         |
|---|---------|
| 1. Introductory Remarks/Meeting Objectives                            | NEI/NRC |
| 2. NEI ESP Guidance Document Overview                                 | NEI     |
| 3. Rulemaking Activities  | NEI     |
| • Duplicative Reviews (item # 12 in NEI's April 3, 2001 letter)       | NEI     |
| • Alternative Site Analysis (item # 32 in NEI's April 3, 2001 letter) | NEI     |
| 4. Milestone Schedule   | NEI     |
| 5. Pre-Application Activities   | NRC/NEI |

**Meeting Attendees**  
**Meeting with NEI on ESP Efforts**  
**May 15, 2001**

<b><u>Name</u></b>	<b><u>Affiliation</u></b>	<b><u>Telephone #</u></b>	<b><u>NRC MS</u></b>
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Joe Hegner	Dominion	(804) 273-2770	
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